



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

ASAP

D5489-045
Job Sheet 182080



Part No: D5489-045

Job Qty: 4 ea

Part Name: Wearplate Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 8/17/18

Job Tracking No:

Due Date: 8/20/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: D5489 REV:B IPP REV:A 17.11.03 AS PER DWG REV:A DD VERF:JFS REV:B 18.05.06 PRELIM B7 DD
VERF:JFS IPP REV:C 18.08.15 AS PER DWG REV:B DD VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	8/20/18	8/20/18	0.00	0.00	Start Up Waterjet		DL 18/08/17
100	Waterjet	4 pcs	8/20/18	8/20/18	0.00	3.62	Waterjet1		DL 18/08/17
110	QC	4 pcs	8/20/18	8/20/18	0.00	0.00	QC2 Waterjet-4		DL 18/08/17
120	QC	4 pcs	8/20/18	8/20/18	0.00	0.00	QC8-6		AUG 23 2018 38
130	Brake NC	4 pcs	8/20/18	8/20/18	0.00	2.39	Brake NC 1		9-89
140	QC	4 pcs	8/20/18	8/20/18	0.00	0.00	QC5		DL 18/08/17
150	Autoweld.1	4 pcs	8/20/18	8/20/18	0.00	4.47	Automated welding		DL 18/08/17
160	QC	4 pcs	8/20/18	8/20/18	0.00	0.00	QC10		AUG 28 2018 38
170	QC	4 pcs	8/20/18	8/20/18	0.00	0.00	QC5		AUG 28 2018 38
180	HandFinish	4 pcs	8/20/18	8/20/18	0.00	1.33	HandFinish4		AR AUG 31 2018 68
190	QC	4 pcs	8/20/18	8/20/18	0.00	0.00	QC3		AUG 31 2018 68
200	Packaging	4 pcs	8/20/18	8/20/18	0.00	0.00	Packaging3-2		9-89
210	QC21-SA	4 Ea	8/20/18	8/20/18	0.00	0.00	QC21		AUG 31 2018 38

Part Op 100 - 1-Cut as per Dwg (D5489-5) Dwg Rev: B Prog Rev: B 2-Deburr if necessary
Descriptions: 150 - ***SEE NOTE 8,9 FOR SURFACE BUILDUP*** 1- WELD AS PER DWG AND QSI004 4.5 FOR AUTOMATED
WELDING USE 8259 HARDCOAT BATCH: AL 8201
180 - COAT ENTIRE TOP (CONCAVE) SURFACE WITH ROCKGUARD AS PER DWG AND PER QSI005 A/R
ROCKGUARD BATCH: 138886
200 - LOCATION : FP002

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304S16GA	304/316 Sheet .063	8 sf (2 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M304S16GA	8	65	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____ Date : _____	DISPOSITION Rework ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Engineering Quality ☐ Pre/Packaging ☐ Other ☐ Supplier ☐
		MRB (QSI042) Approval
Descriptive: Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 813 632-5200 Email: sales@dartaero.com www.dartaerospace.com Container No: S103355 Part: D5489 - 045 Job No: 182080 Serial No/Batch: S103355 Revision: B Inspector: _____ Exp Date: _____ Instructions: Various STC's Date: 08/17/18		Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval
Root Cause		
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐
Temperature ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____		

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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OTHER :																					

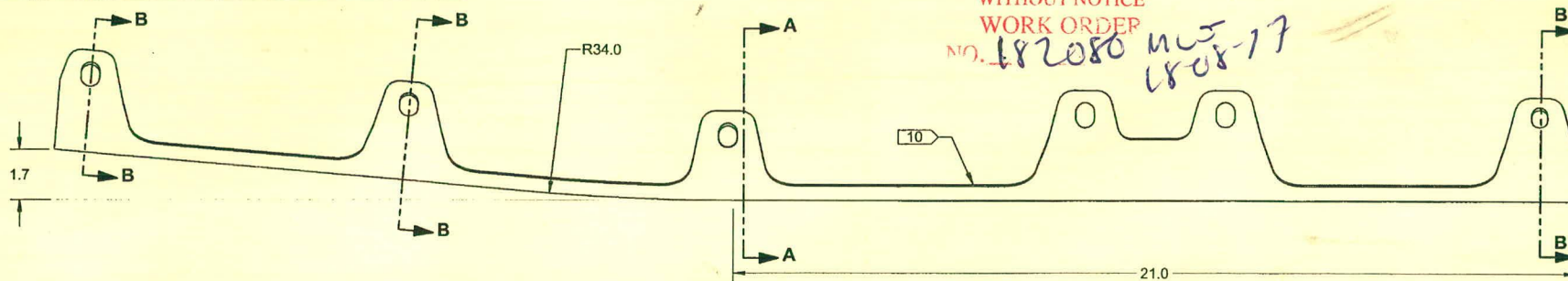
ITEM	QTY -045	P/N	DESCRIPTION
	X	D5489-045	WEARPLATE ASSEMBLY
1	1	D5489-5	WEARPLATE
2	A/R	8259	HARDCOAT SURFACING AUTOMATED WELDING
3	A/R	2059B	HARDCOAT SURFACING MANUAL WELDING

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPIES
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

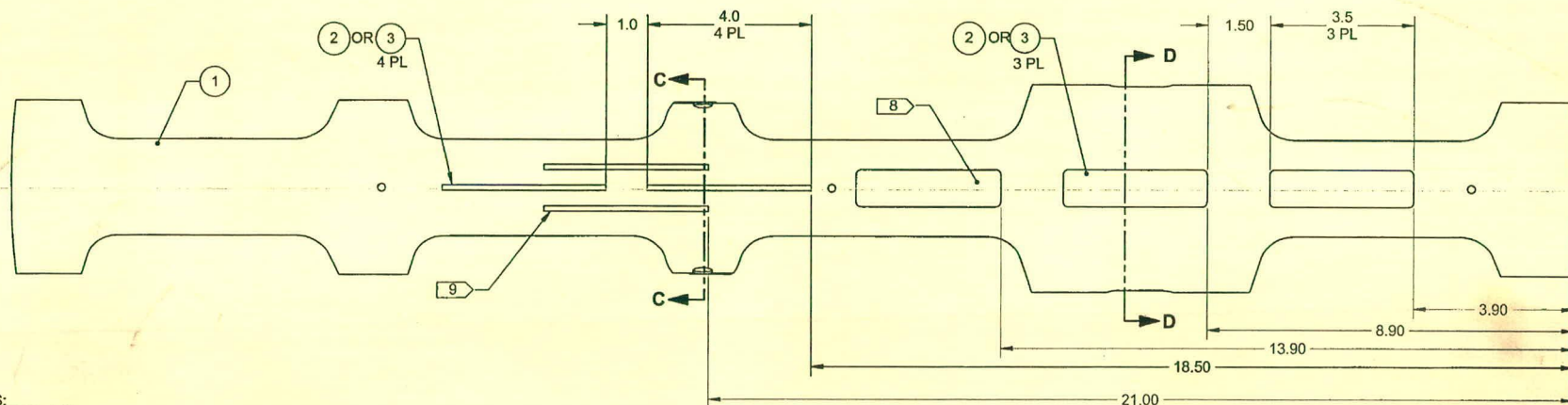
RELEASE

2018 AUG 16

NO. 182080 M/S 1808-17



D5489-5 WEARPLATE
(MAKE FROM D5489-5F) Δ



D5489-045 WEARPLATE ASSEMBLY Δ

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER DART QSI 044 6.1
- 7) WEIGHT: 2.9 lbs
- 8) WELDING: BUILD UP HARD SURFACING 0.17 TO 0.20 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILD UP HARD SURFACING 0.17 TO 0.20 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 9) WELDING: BUILD UP HARD SURFACING 0.06 TO 0.13 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILD UP HARD SURFACING 0.06 TO 0.13 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.020-0.040 THICK, PER DART QSI 005 4.9

APPROVED

DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.
DATE 18.06.14

SAD
SAD
NO
JFS
NO
DS

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO.
D5489
TITLE
WEARPLATE

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REV. B
SHEET 4 OF 7
SCALE
NTS

DQA: _____ Date: _____

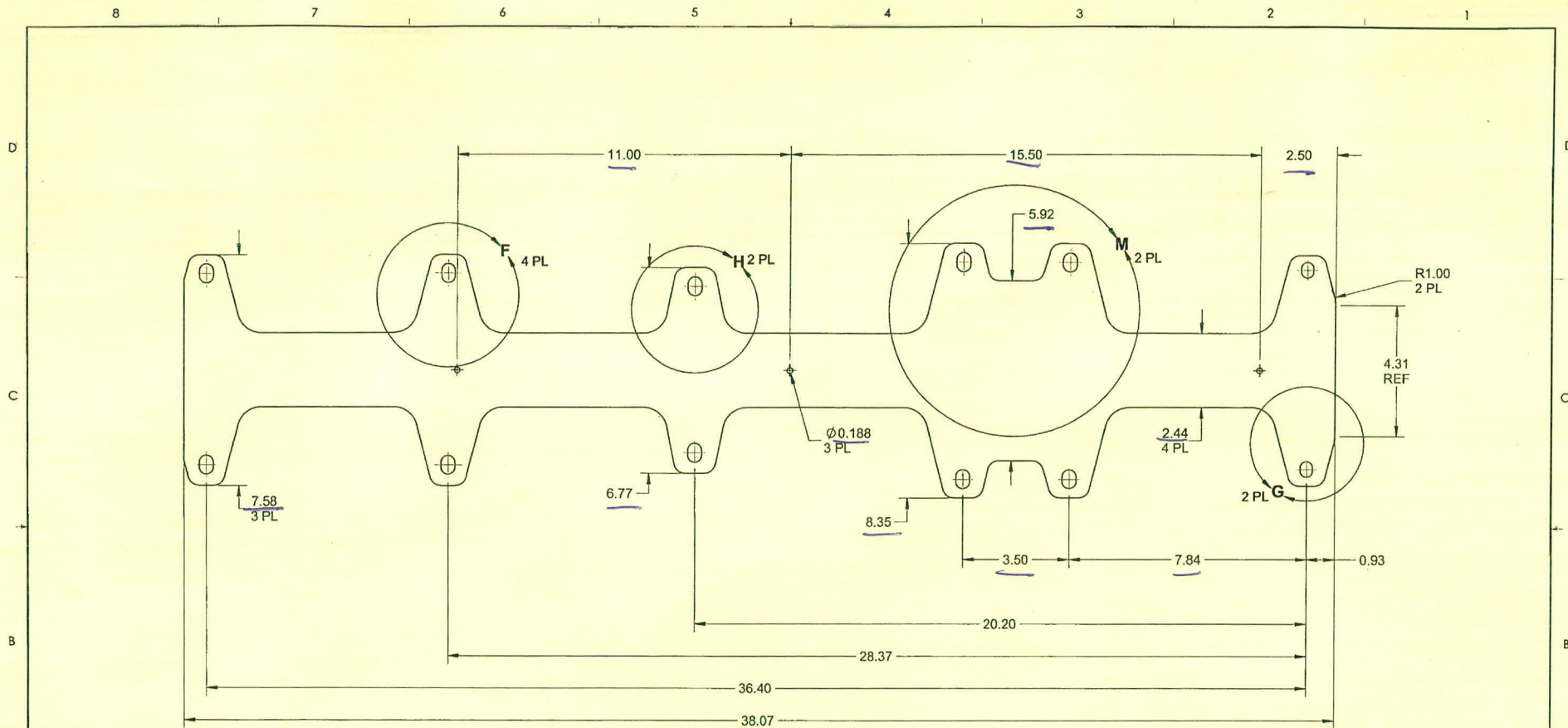


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					



D5489-5F WEARPLATE
(FLAT PATTERN)



RELEASED

2018 AUG 16

NOTES:

1) MATERIAL: AISI 304/316 SS SHEET ANNEALED, 16 GAUGE (0.063"), PER MIL-S-5059 OR AMS 5513 (304), OR AMS 5524 (316), OR ASTM A240, OR ASME SA240
REF DART MATERIAL SPEC M304S16GA

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 2.2 lbs

APPROVED

DESIGN	SAD	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	SAD		
CHECKED	NO	DRAWING NO.	REV. B
MFG. APPR.	JFS	D5489	SHEET 5 OF 7
APPROVED	NO	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
DATE	18.06.14	COPYRIGHT © 2017 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

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WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

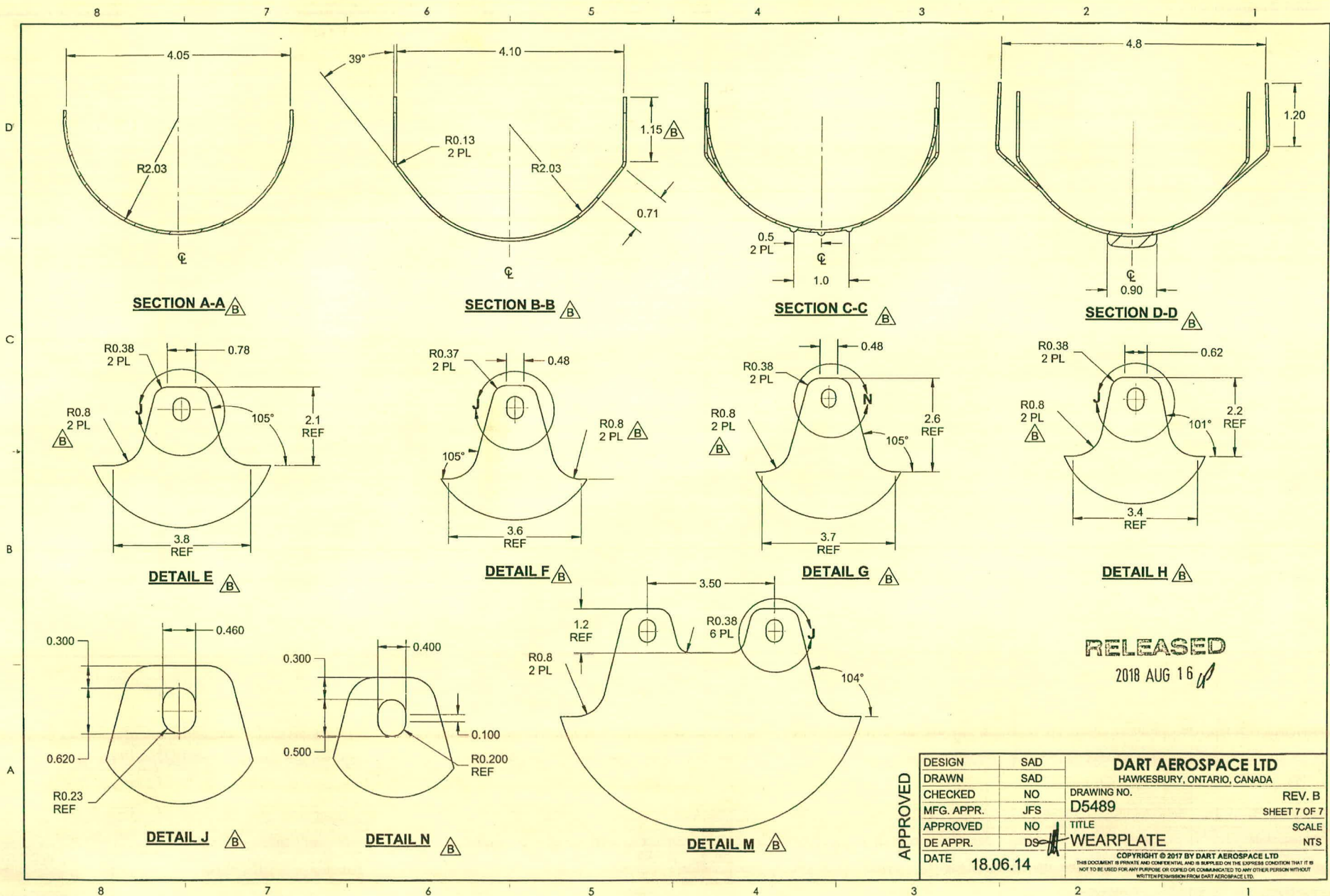
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Date :	Step #:	QTY Effective :	MRB (QSI042) Approval
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Description Work Order Deviation	Disposition	Completed By
		Lead hand / Supervisor Approval Verification
		QC / QA Coordinator Approval

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐				



DQA: _____ Date: _____



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